



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,574	03/01/2004	John D. Mehr	307141.01/MFCP.149222	9871
45809 7590 12/08/2009 SHOOK, HARDY & BACON L.L.P. (c/o MICROSOFT CORPORATION) INTELLECTUAL PROPERTY DEPARTMENT 2555 GRAND BOULEVARD KANSAS CITY, MO 64108-2613				
EXAMINER				
HOSSAIN, TANIM M				
ART UNIT		PAPER NUMBER		
2445				
MAIL DATE		DELIVERY MODE		
12/08/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/790,574

Applicant(s)

MEHR ET AL.

Examiner

Tanim Hossain

Art Unit

2445

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,12-18,42,43 and 45-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,12-18,42,43 and 45-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ ~~Notice of Informal Patent Application~~
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 9, 12-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glass (U.S. 2005/0060643) in view of Kirsch (U.S. 2005/0102366), in further view of Shipp (U.S. 2004/0054498).

As per claim 1, Glass teaches a system that facilitates extracting data in connection with spam processing, comprising: a computer readable storage medium comprising: a component that receives a message and extracts a set of features associated with some part, content or content type of a message (paragraphs 0050-0056); and an analysis component that examines characters within a subject line of the message in connection with building a filter (0050-0056). Glass does not specifically teach that the analysis component examines the consecutiveness of the characters in the subject line. Kirsch teaches the examination of the consecutiveness of characters within a subject line of a message (Abstract; paragraph 0021). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the examination of character consecutiveness in a subject line, as taught by Kirsch in the system of Glass, as this teaching would further enhance the spam filtering process, by adding an additional layer of

security. Both inventions are from the same field of endeavor, namely the efficient filtering of unwanted e-mail messages. Glass-Kirsch does not specifically teach the examination of a content type of the message, where the content type is case-sensitive, in connection with building a filter, where the content type describes data contained within the body of the message. Shipp teaches an analysis component that examines a content type of a message for spam in connection with building a filter, wherein the content type describes data contained within the body of the message, the content type being case-sensitive, and comprising a primary content-type and a secondary content-type, or a combination thereof (paragraphs 0050-0055, 0057-0058). It would have been obvious to one of ordinary skill in the art to include the analysis of case-sensitive content type within the body of a message, as taught by Shipp in the system of Glass-Kirsch. The motivation for doing so lies in the fact that adding this concept would enhance security by filtering non-compliant messages. Further, this concept is well known in the art and would thus have been envisioned by one of ordinary skill. All inventions are from the same field of endeavor, namely the efficient filtering of unwanted e-mail messages.

As per claim 2, Glass-Kirsch-Shipp further teaches that the analysis component determines frequency of consecutive repeating characters within the subject line of the message (Kirsch: Abstract; 0021).

As per claim 4, Glass-Kirsch-Shipp further teaches that the analysis component determines frequency of white space characters within the subject line of the message (Glass: 0050-0056; Kirsch: Abstract; 0021).

As per claim 6, Glass-Kirsch-Shipp further teaches that the analysis component determines a maximum number of consecutive, repeating characters and stores this information (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

As per claim 9, Glass-Kirsch-Shipp further teaches that the analysis component compares the content type of a current message to stored content types of a plurality of other messages to facilitate determining whether the message is spam (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

As per claim 12, Glass-Kirsch-Shipp further teaches that the analysis component further determines time stamps associated with the message (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

As per claim 13, Glass-Kirsch-Shipp further teaches that the analysis component determines a delta between time stamps (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

As per claim 14, Glass-Kirsch-Shipp further teaches that the delta is between a first and a last time stamp (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

As per claim 15, Glass-Kirsch-Shipp further teaches the system of claim 1. While Glass-Kirsch-Shipp teaches the determination of white space and non-white space, there is no specific teaching of determining a percentage of white space to non-white space. As such a determination constitutes a well known calculation, Official Notice is taken that it would have been obvious to one of ordinary skill to include the determination of a percentage, as claimed. The motivation for doing so lies in the fact that a percentage may indicate the occurrence of

certain characters in a relative manner, rather than an absolute manner, which constitutes a design choice, which would have been known by one of ordinary skill.

As per claim 16, Glass-Kirsch-Shipp further teaches that the filter is a spam filter (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

As per claim 18, Glass-Kirsch-Shipp further teaches a machine learning system component that employs at least a subset of extracted features to learn at least one of spam and non-spam (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

Claims 3, 7, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glass-Kirsch-Shipp in view of Official Notice.

As per claim 3, Glass-Kirsch-Shipp further teaches that the characters comprise spaces, but does not specifically teach that they comprise letters, numbers, or punctuation (Glass: 0050-0056; Kirsch: Abstract; 0021). Official Notice is taken that in view of the use of space characters, any type of character may be used to for consecutiveness analysis. Character analysis is well known in the art of spam filtering, and using different types of characters would have been envisioned by one of ordinary skill.

As per claim 7, Glass-Kirsch-Shipp further teaches that the analysis component establishes ranges of consecutive, repeating characters, whereby messages can be sorted by their respective individual count of consecutive repeating characters (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058). Glass-Kirsch-Shipp further teaches scoring the messages based on a similarity calculator (Glass: 0167), but does not specifically teach that the ranges correspond to varying degrees of spaminess. Official Notice is taken that it would have

been obvious to one of ordinary skill in the art at the time of the invention to include a specific degree of spam-likeness, as this teaching is well known in the art of spam filtration. The motivation for doing so lies in the fact that having a degree of likelihood that the message is spam would enable more sophisticated and sensitive filtering, such that potentially legitimate messages need not be filtered as spam, for example.

As per claim 17, Glass-Kirsch-Shipp teaches the system of claim 1, but does not specifically teach that the filter is a parental control filter. Official Notice is taken that it would have been obvious to one of ordinary skill in the art to include this limitation, as the use of parental control filters is very well known in the art of message filtering. The motivation for the inclusion lies in the fact that parents can prevent their children from receiving objectionable material, which would further enhance the security aims of Glass-Kirsch-Shipp.

Claims 5, 42, 43, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glass-Kirsch-Shipp in view of Wilson (U.S. 2008/0168145).

As per claim 5, Glass-Kirsch-Shipp teaches the system of claim 1, but does not specifically teach that the analysis component determines distance between at least one alphanumeric character and a blob, wherein the blob comprises a random sequence of characters, numbers, punctuation, or a combination thereof. Wilson teaches the determination of a distance between a character and a blob as claimed (paragraph 0063). It would have been obvious to one of ordinary skill to include the ability for this analysis, as this concept is well known in the art, and would provide further spam filtering. This would increase the efficiency of the system. All inventions are from the same field of endeavor, namely the prevention of spam email.

As per claim 42, Glass-Kirsch-Shipp-Wilson teaches a method for evaluating spam as a function of message content, comprising: employing a processor executing computer readable instructions stored on a computer readable storage medium to implement the following: parsing a message to extract a set of features associated with a part, content, or content type of the message, wherein the content type describes the type of data contained within a body of the message, the content type being case-sensitive and comprising a primary content-type and a secondary-content type, or combinations thereof (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058); and examining the extracted set of features to identify consecutiveness of repeating characters within a subject line of the message to classify the message as spam or not spam and to identify consecutiveness of repeating characters within a subject line of the message to classify the message as spam or not spam and to identify a distance of white-space characters between at least one alpha-numeric character and a blob comprising a random sequence of characters, numbers, punctuation, or a combination thereof (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058; Wilson: 0063); and processing the message as a function of the classification (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

As per claim 43, Glass-Kirsch-Shipp-Wilson teaches the method of claim 42, examining the consecutiveness of repeating characters comprises determining a frequency of the consecutive of repeating characters, wherein the characters comprise letters, numbers, punctuation, or white space (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

As per claim 45, Glass-Kirsch-Shipp-Wilson teaches the method of claim 42, further comprising: establishing ranges of consecutive, repeating characters, the ranges correspond to various degrees of spaminess (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058); and employing the ranges to sort messages by their respective individual count of consecutive repeating characters (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

As per claim 46, Glass-Kirsch-Shipp teaches the method of claim 42, further comprising comparing the set of features of the message to stored content types of a plurality of other messages to determine whether the message is spam (Glass: 0050-0056; Kirsch: Abstract; 0021; Shipp: 0050-0055, 0057-0058).

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glass-Kirsch-Shipp-Wilson in view of Official Notice.

As per claim 47, Glass-Kirsch-Shipp-Wilson teaches one or more computer-readable media having computer-executable instructions embodied thereon that, when executed, perform a method for facilitating extracting data in connection with spam processing, comprising: receiving a message (Glass: 0050-0056); extracting a set of features associated with some part, content or content type of the message (Glass: 0050-0056); examining consecutive of characters within a subject line of the message and identifying a distance comprising a number of white-space characters between at least one alpha-numeric character and a blob comprising a random sequence of characters, numbers, punctuation of a combination thereof (Kirsch: Abstract; 0021; Wilson: 0063); examining a content type of the message for spam in connection with building a

filter, wherein the content type describes data contained within a body of the message, the content type being case-sensitive to capture a variation of a primary content-type, a secondary content-type, or a combination thereof, each of the primary content-type and the secondary content-type comprising of a text, a multipart, a message, an image, an audio, a video, or an application (Shipp: 0050-0055, 0057-0058); and determining the amount of white space and non-white space in the subject line of the message and the amount of non-white space and non-numeric characters that are not letters in the subject line of the message (Kirsch: Abstract; 0021; Wilson: 0063). While Glass-Kirsch-Shipp-Wilson teaches the determination of white space and non-white space, there is no specific teaching of determining a percentage of white space to non-white space. As such a determination constitutes a well known calculation, Official Notice is taken that it would have been obvious to one of ordinary skill to include the determination of a percentage, as claimed. The motivation for doing so lies in the fact that a percentage may indicate the occurrence of certain characters in a relative manner, rather than an absolute manner, which constitutes a design choice, which would have been known by one of ordinary skill.

Response to Remarks

Applicant's remarks filed on August 11, 2009 have fully been considered, and are respectfully traversed by the new grounds of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is (571)272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571/272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tanim Hossain
Patent Examiner
Art Unit 2445

/Rupal D. Dharia/
Supervisory Patent Examiner, Art Unit
2400